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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,736	04/30/2001	Masaaki Bannai	389.40083X00	9146

20457 7590 11/02/2004

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ARLINGTON, VA 22209-9889

EXAMINER
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BORISSOV, IGOR N

ART UNIT	PAPER NUMBER
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3629

DATE MAILED: 11/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/843,736

Applicant(s)

BANNAI ET AL.

Examiner

Igor Borissov

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2,3,5-8,10,12-15,17 and 19-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,5-8,10,12-15,17 and 19-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/26/2004 has been entered.

### ***Response to Amendment***

Amendment received on /2004 is acknowledged and entered. Claims 1, 4, 9, 11, 16, 18 and 24-25 have been canceled. Claims 2, 3, 8, 10, 12, 14, 17, 19, 21, 22 and 23 have been amended. Claims 2-3, 5-8, 10, 12-15, 17 and 19-23 are currently pending in the application.

### ***Examiner's Notes***

Claim Objections have been withdrawn based on the applicant's amendment.

Claim Rejections under 35 USC § 112 have been withdrawn based on the applicant's amendment.

Claims 14 and 15, originally indicated as allowable, now stand rejected upon reconsideration.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 2-3, 5-8, 10, 12-15, 17 and 19-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yablonowski et al. (Yablonowski).**

**Claim 2.** Yablonowski teaches a system for monitoring energy consumption of lighting systems, comprising: a database for storing energy consumption data before taking energy-saving measures and general information about a facility; measuring means which measures the energy consumption after taking energy-saving measures; and calculating means for calculating energy curtailment quantities before and after taking said energy-saving measures by incorporating measured data obtained by said measuring means via a communication line and comparing said measured data and said energy consumption data stored in said database (C. 3, 49-61; C. 5, L. 9-25; C. 6, L. 54-67); wherein said general information includes data related to air conditioning (thereby obviously indicating temperature and humidity data); and operation condition data including hours of operation, kilowatt hours rates and whether operating hours vary in different places of the facility (C. 6, L. 28-38).

Information as to *in which form the database is stored* is non-functional language and given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would otherwise have been obvious. See: *In re Gulack* 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) *In re Dembiczak* 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999). Furthermore, there is no indication in the specification that *storing data in the specific form* provides the advantage over the

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prior art. Without such indication, it appears that storing data *in a form correlated with attribute data* is an obvious variation of any know database organization structure.

**Claim 3.** Same system as in claim 2, including calculating means for calculating the energy curtailment quantities before and after taking said energy-saving measures by incorporating measured data obtained by said measuring means and comparing said measured data and said energy consumption data stored in said database (C. 6, L. 54-67).

**Claims 5.** Same system as in claim 2, including calculating means for calculating the energy curtailment quantities before and after taking said energy-saving measures, and charging an amount obtained by said calculating (column 8, lines 30-58).

**Claims 6.** Same system as in claim 5. Information as to *wherein said ratio is determined with reference to the operating hours... of said facility* is non-functional language and given no patentable weight. Claims Directed to an Apparatus must be distinguished from the prior art in terms of structure rather than function, *In re Danly* 263 F.2d 844, 847, 120 USPQ 582, 531 (CCPA 1959). Furthermore, a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1657 (bd Pat. App. & Inter. 1987).

**Claim 7.** Same system as in claim 5, including calculating means for calculating the energy curtailment quantities before and after taking said energy-saving measures, and charging an amount obtained by said calculating, wherein billing for a time period is calculated as a function of the power saving for that particular time period (column 8, lines 30-58). Information as to *if the total amount of the fixed and variable costs is Q, the annual amount of curtailment of energy costs is P, and  $\alpha$  and  $\beta$  are positive coefficients*

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(where  $\alpha > \beta$ ), said energy service enterprise receives:  $X1\%$  of the curtailment amount of energy costs when  $P \geq \alpha Q$ ;  $X2\%$  of the curtailment amount of energy costs when  $\beta Q \leq P < \alpha Q$  (where,  $X1 < X2$ ); and a predetermined amount when  $P < \beta Q$  is non-functional language and given no patentable weight. Claims Directed to an Apparatus must be distinguished from the prior art in terms of structure rather than function, *In re Danly* 263 F.2d 844, 847, 120 USPQ 582, 531 (CCPA 1959). Furthermore, a claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1657 (bd Pat. App. & Inter. 1987).

**Claim 8.** Yablonowski teaches a method for monitoring energy consumption of lighting systems, comprising: installing an energy-saving equipment by the energy service provider at no cost to the facility (client) (C. 7, L. 8-10); measuring and recording the energy consumption data of said energy-saving equipment before and after installation of said equipment, and general information about a facility; calculating the difference in value of the energy consumption before and after installation of said energy-saving equipment; calculating the amount of curtailment of the energy costs based on said calculation; and allowing said energy service provider to collect said installation cost from said amount of curtailment (C. 3, L. 49-61; C. 5, L. 9-25; C. 6, L. 54-67); wherein said general information includes data related to air conditioning (thereby obviously indicating); and operation condition data including hours of operation, kilowatt hours rates and whether operating hours vary in different places of the facility (C. 6, L. 28-38).

Yablonowski does not specifically teach that said data related to air conditioning includes *temperature and humidity data*.

However, it is old and well known that operation of an air conditioner unit affects temperature and humidity in the facility where said unit is installed.

Therefore, it would have been obvious to one having ordinary skill in art the time the invention was made to modify Yablonowski to include that said data related to air conditioning includes *temperature and humidity data*, because it would advantageously enhance the accuracy of the calculation of the energy consumption at the facility, thereby maximize revenue.

Information as to *with which said attribute data agree within a set allowable range* is non-functional language and given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would otherwise have been obvious. See: *In re Gulack* 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) *In re Dembiczak* 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999).

**Claim 10.** Yablonowski teaches a method for monitoring energy consumption of lighting systems, comprising: installing an energy-saving equipment by the energy service provider at no cost to the facility (client) (C. 7, L. 9-10); measuring and recording the energy consumption data of said energy-saving equipment before and after installation of said equipment, and general information about a facility; calculating the difference in value of the energy consumption before and after installation of said energy-saving equipment; calculating the amount of curtailment of the energy costs based on said calculation (C. 3, L. 49-61; C. 5, L. 9-25; C. 6, L. 54-67); and allowing said energy service provider to receive at least a part of said amount of curtailment (C. 7, L. 11-13); wherein said general information includes air conditioning data, and operation condition data, which includes hours of operation, kilowatt hours rates and whether operating hours vary in different places of the facility (C. 6, L. 28-38).

Yablonowski does not specifically teach that said air conditioning data includes *temperature and humidity data*.

However, it is old and well known that operation of an air conditioner unit affects temperature and humidity in the facility where said unit is installed.

Therefore, it would have been obvious to one having ordinary skill in art the time the invention was made to modify Yablonowski to include that said air conditioning data includes *temperature and humidity data*, because it would advantageously enhance the accuracy of the calculation of the energy consumption at the facility, thereby maximize revenue.

Information as to *with which said attribute data agree within a set allowable range* is non-functional language and given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would otherwise have been obvious. See: *In re Gulack* 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) *In re Dembiczak* 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999).

**Claim 12.** Said method as in claim 10, wherein calculating the amount of curtailment of the energy costs is conducted based on operation condition data including hours of operation, kilowatt hours rates and whether operating hours vary in different places of the facility (C. 6, L. 28-38).

**Claims 13 .** Yablonowski teaches said method as in claim 10, wherein said energy service provider performs maintenance of the equipment subjected to energy-saving measures without compensation (C. 8, L. 52-58), after reviewing the feasibility of the project and profit margin (C. 6, L. 54-65).

However, Yablonowski do not specifically teach that reviewing the feasibility of the project and profit margin includes establishing a predetermined reference value.

However, it is old and well known that cost estimate of a business project includes establishing predetermined reference values, such as calculating break even, cost of manufacturing, goods sold, etc.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Yablonowski to include that reviewing the feasibility of the project and profit margin includes establishing a predetermined



reference value, because it would advantageously allow to employ existing business modeling tools, thereby assure accuracy in estimating funds needed for the project.

**Claims 14 and 15.** Yablonowski teaches said method as in claim 10, including: calculating the amount of curtailment of the energy costs; and allowing said energy service provider to receive at least a part of said amount of curtailment (C. 3, L. 49-61; C. 5, L. 9-25; C. 6, L. 54-67); wherein billing for a time period is calculated as a function of the power saving for that particular time period (C. 8, L. 40-50).

Yablonowski does not specifically teach that *if the total amount of the fixed and variable costs is Q, the annual amount of curtailment of energy costs is P, and  $\alpha$  and  $\beta$  are positive coefficients (where  $\alpha > \beta$ ), said energy service enterprise receives: X1% of the curtailment amount of energy costs when  $P \geq \alpha Q$ ; X2% of the curtailment amount of energy costs when  $\beta Q \leq P < \alpha Q$  (where,  $X1 < X2$ ); and a predetermined amount when  $P < \beta Q$ ; and wherein said X2 is calculated by the formula:*

$$X2 = X1 + (\alpha - P/Q)(100-X1)/(\alpha - \beta).$$

However, there is no indication in the specification that said formula provides the advantage over the prior art. Without such indication, it appears that said formula is obvious variation of any known calculation method.

**Claim 17.** Yablonowski teaches a method for monitoring energy consumption of lighting systems, comprising: conducting feasibility study of a project for installing an energy-saving equipment by the energy service provider (C. 6, L. 54-65); at no cost to the facility (client) (C. 7, L. 8-10); measuring and recording the energy consumption data of said energy-saving equipment after installation of said equipment, and general information about a facility; calculating the difference in value of the energy consumption before and after installation of said energy-saving equipment; calculating the amount of curtailment of the energy costs based on said calculation (C. 3, L. 49-61; C. 5, L. 9-25; C. 6, L. 54-67); and providing carefully monitoring and maintenance of the power consumption to insure that the power saving devices continue to function

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properly (C. 8, L. 52-54), thereby obviously indicating confirming the assured quantity of curtailment; wherein said general information includes air conditioning data, and operation condition data, which includes hours of operation, kilowatt hours rates and whether operating hours vary in different places of the facility (C. 6, L. 28-38).

Yablonowski does not specifically teach that said air conditioning data includes *temperature and humidity data*.

However, it is old and well known that operation of an air conditioner unit affects temperature and humidity in the facility where said unit is installed.

Therefore, it would have been obvious to one having ordinary skill in art the time the invention was made to modify Yablonowski to include that said air conditioning data includes *temperature and humidity data*, because it would advantageously enhance the accuracy of the calculation of the energy consumption at the facility, thereby maximize revenue.

Information as to *with which said attribute data agree within a set allowable range* is non-functional language and given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would otherwise have been obvious. See: *In re Gulack* 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) *In re Dembiczak* 175 F.3d 994, 1000, 50 USPQ2d 1614, 1618 (Fed. Cir. 1999).

**Claim 19.** Said method as in claim 17, wherein calculating the amount of curtailment of the energy costs is conducted based on operation condition data including hours of operation, kilowatt hours rates and whether operating hours vary in different places of the facility (C. 6, L. 28-38).

**Claim 20.** Said method as in claim 19, wherein feasibility study of the project is conducted before realization of the project (C. 6, L. 54-64). Information as to *one set of condition has an allowable range* is non-functional language and given no patentable weight. Non-functional descriptive material cannot render non-obvious an invention that would otherwise have been obvious. See: *In re Gulack* 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983) *In re Dembiczak* 175 F.3d 994, 1000, 50 USPQ2d

1614, 1618 (*Fed. Cir. 1999*). The specific example of non-functional descriptive material is provided in MPEP 2106, Section VI: (example 3) a process that differs from the prior art only with respect to non-functional descriptive material that cannot alter how the process steps are to be performed.

**Claim 21.** Said method as in claim 17, wherein said energy service provider receives at least a part of said amount of curtailment receive at least a part of said amount of curtailment (C. 7, L. 9-13); said amount of curtailment compensate the retrofitting and maintenance of said energy efficient equipment (C. 8, L. 48-58).

**Claim 22.** Said method as in claim 21, wherein calculating the amount of curtailment of the energy costs is conducted based on operation condition data including hours of operation, kilowatt hours rates and whether operating hours vary in different places of the facility (C. 6, L. 28-38).

**Claims 23 .** Yablonowski teaches said method as in claim 21, wherein said energy service provider performs maintenance of the equipment subjected to energy-saving measures without compensation (C. 8, L. 52-58), after reviewing the feasibility of the project and profit margin (C. 6, L. 54-65).

However, Yablonowski do not specifically teach that reviewing the feasibility of the project and profit margin includes establishing a predetermined reference value.

However, it is old and well known that cost estimate of a business project includes establishing predetermined reference values, such as calculating break even, cost of manufacturing, goods sold, etc.

Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Yablonowski to include that reviewing the feasibility of the project and profit margin includes establishing a predetermined reference value, because it would advantageously allow to employ existing business modeling tools, thereby assure accuracy in estimating funds needed for the project.

### ***Response to Argument***

Applicant's arguments filed 8/20/04 have been fully considered but they are not persuasive.

In response to applicant's argument that Yablonowski does not teach variable characteristics of the facility, including *temperature and humidity, and operating condition*, it is noted that Yablonowski teaches: measuring and recording the energy consumption data of said energy-saving equipment before and after installation of said equipment, and general information about a facility; wherein said general information includes air conditioning data, and operation condition data, which includes hours of operation, kilowatt hours rates and whether operating hours vary in different places of the facility (C. 6, L. 28-38).

Furthermore, it is old and well known that operation of an air conditioner unit affects temperature and humidity in the facility where said unit is installed.

Therefore, it would have been obvious to one having ordinary skill in art the time the invention was made to modify Yablonowski to include that said data related to air conditioning includes *temperature and humidity data*, because it would advantageously enhance the accuracy of the calculation of the energy consumption at the facility, thereby maximize revenue (See a discussion above).

In response to applicant's argument that Yablonowski does not teach comparing the energy saving data before and after installing energy-saving equipment, the examiner maintains that Yablonowski teaches: conducting feasibility study of the project including calculating the difference in value of the energy consumption before and after installation of said energy-saving equipment (See: C. 6, L. 54-67; and the discussion above).

**Conclusion**

Any inquiry concerning this communication should be directed to Igor Borissov at telephone number (703) 305-4649.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Receptionist whose telephone number is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, John Weiss, can be reached at (703) 308- 2702.

Any response to this action should be mailed to:

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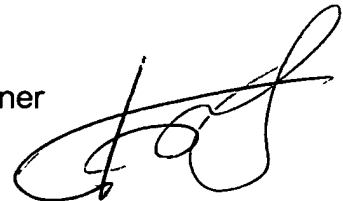
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or faxed to:

**(703) 872-9306** [Official communications; including After Final  
communications labeled "Box AF"]

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7<sup>th</sup> floor receptionist.

Igor Borissov  
Patent Examiner  
Art Unit 3629



IB

10/28/2004